WHAT IS CLAIMED IS:

 An image processing apparatus capable of outputting image data, comprising:

reference-signal generation means for generating a first reference signal and a second reference signal serving as processing-timing references;

first acquisition means for acquiring image data;

generation means for processing the image data acquired
by the first acquisition means, according to timing
determined by the first reference signal to generate image
data having a first frame rate;

conversion means for converting the image data having the first frame rate generated by the generation means to image data having a different frame rate;

first output means for outputting image data having a second frame rate determined by the second reference signal, converted by the conversion means, to a first another image processing apparatus; and

second output means for outputting image data having a third frame rate, converted by the conversion means, to a second another image processing apparatus.

2. An image processing apparatus according to Claim 1, further comprising display means for displaying the image

data having the second frame rate determined by the second reference signal, converted by the conversion means.

- 3. An image processing apparatus according to Claim 1, wherein the second frame rate is the frame rate of an image format processed by the first another image processing apparatus to which the image data is output by the first output means.
- 4. An image processing apparatus according to Claim 1, wherein the third frame rate is the frame rate of an image format processed by the second another image processing apparatus to which the image data is output by the second output means.
- 5. An image processing apparatus according to Claim 1, wherein the second frame rate is the frame rate of a first image format processed by the first another image processing apparatus to which the image data is output by the first output means;

the third frame rate is the frame rate of a second image format processed by the second another image processing apparatus to which the image data is output by the second output means; and

the first frame rate is a frame rate not related to the

first image format or the second image format.

- 6. An image processing apparatus according to Claim 1, wherein the second frame rate is the same as the third frame rate.
- 7. An image processing apparatus according to Claim 1, further comprising input means for receiving the input of the image data having the second frame rate from the first another image processing apparatus,

wherein the conversion means further converts the image data having the second frame rate input by the input means to image data having the third frame rate.

- 8. An image processing apparatus according to Claim 1, wherein the first another image processing apparatus, which receives the input of the image data having the second frame rate output from the first output means, encodes the image data output from the first output means, according to a predetermined image format.
- 9. An image processing apparatus according to Claim 1, wherein the second another image processing apparatus, which receives the input of the image data having the third frame rate output from the second output means, displays the image

data output from the second output means, according to a predetermined image format.

- 10. An image processing apparatus according to Claim 1, further comprising encoding means for encoding the image data acquired by the acquisition means, by software processing at timing determined by the first reference signal.
- 11. An image processing method for an image processing apparatus capable of outputting image data, comprising:
- a reference-signal generation step of generating a first reference signal and a second reference signal serving as processing-timing references;

an acquisition control step of controlling the acquisition of image data;

a generation step of processing the image data of which the acquisition is controlled by the process of the acquisition control step, according to timing determined by the first reference signal to generate image data having a first frame rate;

a conversion step of converting the image data having the first frame rate generated by the process of the generation step to image data having a different frame rate;

a first output step of outputting image data having a

second frame rate determined by the second reference signal, converted by the process of the conversion step, to a first another image processing apparatus; and

a second output step of outputting image data having a third frame rate, converted by the process of the conversion step, to a second another image processing apparatus.

12. A recording medium having recorded therein a computer-readable program for an image processing apparatus capable of outputting image data, the program comprising:

a reference-signal generation step of generating a first reference signal and a second reference signal serving as processing-timing references;

an acquisition control step of controlling the acquisition of image data;

a generation step of processing the image data of which the acquisition is controlled by the process of the acquisition control step, according to timing determined by the first reference signal to generate image data having a first frame rate;

a conversion step of converting the image data having the first frame rate generated by the process of the generation step to image data having a different frame rate;

a first output step of outputting image data having a second frame rate determined by the second reference signal,

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converted by the process of the conversion step, to a first another image processing apparatus; and

a second output step of outputting image data having a third frame rate, converted by the process of the conversion step, to a second another image processing apparatus.

13. A computer-executable program for controlling an image processing apparatus capable of outputting image data, the program comprising:

a reference-signal generation step of generating a first reference signal and a second reference signal serving as processing-timing references;

an acquisition control step of controlling the acquisition of image data;

a generation step of processing the image data of which the acquisition is controlled by the process of the acquisition control step, according to timing determined by the first reference signal to generate image data having a first frame rate;

a conversion step of converting the image data having the first frame rate generated by the process of the generation step to image data having a different frame rate;

a first output step of outputting image data having a second frame rate determined by the second reference signal, converted by the process of the conversion step, to a first

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another image processing apparatus; and

a second output step of outputting image data having a third frame rate, converted by the process of the conversion step, to a second another image processing apparatus.

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